

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

35. – 46. (Cancelled)

47. (Currently Amended) ~~The~~ An apparatus of claim 40 ~~where the~~ electroforming tissue to reshape the tissue comprising:

means for creating stress in the tissue to temporarily define and maintain a predetermined shape of the tissue;

means for monitoring the stresses in the tissue comprises a means for monitoring the color of the tissue as caused by electroplating a material thereon;

means for causing a direct current of a predetermined polarity to flow in the tissue to mediate the tissue while the created stress is present to permanently change shape of the tissue or material parameters of the tissue without necrosis or ablation; and

means for controlling the direct current flowing in the tissue according to the stresses therein.

49. (Cancelled)

50. (Currently Amended) ~~The~~ An apparatus of claim 49 ~~where the~~ electroforming tissue to reshape the tissue comprising:

means for creating stress in the tissue to temporarily define and maintain a predetermined shape of the tissue;

means for causing a direct current of a predetermined polarity to flow in the tissue comprises means for applying voltage pulses of the same polarity to form a DC pulse train to mediate the tissue while the created stress is present to permanently change shape of the tissue or material parameters of the tissue without necrosis or ablation; and

means for applying a voltage of predetermined polarity to obtain a predetermined bioeffect comprises means for applying a first sequence of voltage pulses of the same polarity and means for applying a second sequence of voltage pulses of the opposite polarity to form a complex DC pulse train.

51. (Currently Amended) ~~The An apparatus of claim 50 where the electroforming tissue to reshape the tissue comprising:~~

means for creating stress in the tissue to temporarily define and maintain a predetermined shape of the tissue;

means for causing a direct current of a predetermined polarity to flow in the tissue comprises means for applying voltage pulses of the same polarity to form a DC pulse train to mediate the tissue while the created stress is present to permanently change shape of the tissue or material parameters of the tissue without necrosis or ablation;

means for applying a voltage of predetermined polarity to obtain a predetermined bioeffect comprises means for applying a first sequence of voltage

pulses of the same polarity and means for applying a second sequence of voltage pulses of the opposite polarity to form a complex DC pulse train; and

means for applying a first sequence and means for applying a second sequence of voltage pulses provide a net charge cancellation when integrated over an application time.

52. -. 56. (Cancelled)

57. (new) An apparatus for electroforming cartilage in vivo comprising:
at least one needle for penetrating the cartilage at a selected location for locally mediating pH in the cartilage at the selected location;
a source of low voltage DC current coupled to the needle to locally mediate pH in the cartilage at the selected location in the proximity of the needle thereby creating a controlled mechanical stress in the cartilage by causing a biochemical redox reaction at the selected location, which reaction reshapes the cartilage at the selected location with a minimally invasive treatment.

58. (new) The apparatus of claim 57 further comprising:
a plurality of needles for penetrating the cartilage at a corresponding plurality of selected locations to reshape the cartilage at the selected locations;
where the source of low voltage DC current is coupled to the plurality of needles to locally mediate pH in the cartilage at the selected locations in the proximity of

each of the needles thereby creating a controlled mechanical stress in the cartilage at each corresponding location which reshapes the cartilage.